HDMI 201 A D

HDMI Twisted Pair Extender with Audio - Decora® Wallplate

HDMI 201 A D Transmitter HDMI 201 A D Receiver

FEATURES

- **Transmits HDMI and RS-232 signals over two CAT 5-type cables** — Standard UTP/STP cables provide an economical, easily installed cable solution.
- **Inputs: HDMI connector, captive screw connector, and two RCA connectors - HDMI 201 A D Tx**
- **Outputs: HDMI connector, captive screw connector, and two RCA connectors - HDMI 201 A D Rx**
- **Sends 720p, 1080i, and XGA (1024x768) signals over 200 feet (60 meters), 1080p/60 and 1920x1200 signals over 100 feet (30 meters)** — Utilization of STP - Shielded Twisted Pair cabling provides added protection from outside interference and increases overall signal transmission distances.
- **HDCP compliant** — The HDMI 201 A D fully supports long distance transmission of HDCP signals.
- **Supports DDC transmission** — DDC channels are actively buffered, allowing pass-through of EDID and HDCP information to attached displays.
- **Extends video, audio, and control signals** — The HDMI 201 A D extends digital video, multi-channel audio, and control signals from HDMI-equipped devices.
- **Transmits additional stereo audio signals** — The HDMI 201 A D can send balanced or unbalanced stereo audio signals not embedded within the HDMI signal, over a separate audio cable.
- **Remote powering of transmitter or receiver** — Only one power supply is necessary to power both devices.
- **LED indicator for signal presence and power**
- **Bi-directional RS-232/IR pass-through** — Bi-directional RS-232 control or IR signals can be transmitted alongside the HDMI signals, so that the remote display can be controlled without the need for additional cabling.
- **Compatible with standard HDMI 201 transmitter and receiver** — Enables mixing and matching of desktop and wallplate transmitters and receivers to meet application requirements.
- **Mounts in an included Decora®-style wall plate** — The HDMI 201 A D transmitter and receiver can be installed with a one-gang electrical box or Extron MR 100 Mud Ring, part # 70-519-12.
- **External universal power supply included with Tx models and Tx/Rx sets, part # 70-775-01** — Provides worldwide power compatibility.

DESCRIPTION

The Extron **HDMI 201 A D** is a Decora®-style transmitter and receiver set that enables HDMI signals to be carried over distances significantly greater than the lengths of standard HDMI cables. In addition, it can accept and transmit stereo audio and RS-232 or IR signals. Linked together using two economical and integration friendly CAT 5, CAT 5e, CAT 6, or CAT 7 cables, the HDMI 201 A D transmitter and receiver work together to send HDTV and XGA (1024x768) resolution HDMI signals over 200 feet (60 meters).

The HDMI 201 A D is fully HDMI-compliant for extending digital video, multi-channel audio, and control signals from HDMI-equipped devices. It is also HDCP compliant, enabling long distance transmission of HDTV signals with HDCP - High-bandwidth Digital Content Protection for copy protection of digital television broadcasts and high resolution digital video output from DTV tuners and DVRs, and Blu-ray Disc players.

For convenient, streamlined system integration, the HDMI 201 A D supports transmission of balanced or unbalanced stereo audio signals, when a separate audio cable is installed between the transmitter and the receiver. RS-232 or IR signals from a third-party control system can also be transmitted over the same cabling as the HDMI signals, providing remote control of a projector or flat-panel display. An LED indicator provides a quick means of verifying power and signal presence. Additionally, either the transmitter or receiver can be remotely powered over this cabling, so that external power is necessary for only one of the devices.

The HDMI 201 A D transmitter and receiver are designed for wall-mounting with the included Decora-style wallplates. Both devices are also available separately, and may be matched with the standard desktop HDMI 201 transmitter or receiver to suit the installation requirements of a specific application.

SPECIFICATIONS

NOTE: This product consists of a transmitter (HDMI 201 TX or HDMI 201 D TX) and a receiver (HDMI 201 RX or HDMI 201 A D RX) with twisted pair cables linking the transmitter and receiver.

NOTE: *Appropriate HDMI to DVI-D cables or adapters are required for DVI signal input/output.

VIDEO INPUT — TX UNITS

Number/signal type ..... 1 single link HDMI (or DVI-D*)
Connectors ..... 1 female HDMI type A

INTERCONNECTION BETWEEN TRANSMITTER AND RECEIVER

Connectors ..... (2) RJ-45 per unit for 2 CAT 5/5e/6/7 UTP (unshielded twisted parir) or STP (shielded twisted pair) cables connecting the transmitter and receiver
Termination standards ..... TIA/EIA T568A or T568B. Pin configurations for each standard are available in the manual's installation chapter.

Signal transmission distance
1080p or 1900x1200 @ 60 Hz
CAT 5/5e/6/7 STP ..... Up to 125' (38 m)
CAT 5/5e/6 UTP ..... Up to 100' (30 m)
720p/1080i or 1024x768 @ 60 Hz
CAT 5/5e/6/7 UTP or STP ..... 200' (60 m)

NOTE: The transmission distance varies greatly depending on the signal resolution and on the type of cable, graphic card, and display used in the system.

MODEL	VERSION DESCRIPTION	PART #
HDMI 201 A D Tx/Rx	Transmitter/Receiver Set - Black	60-864-02
HDMI 201 A D Tx/Rx	Transmitter/Receiver Set - White	60-864-03
HDMI 201 A D Tx	Transmitter - Black	60-864-12
HDMI 201 A D Tx	Transmitter - White	60-864-13
HDMI 201 A D Rx	Receiver - Black	60-864-22
HDMI 201 A D Rx	Receiver - White	60-864-23

Note: The standard HDMI 201 transmitters and receivers do not accommodate separate stereo audio signals.
The HDMI 201 A D is not compatible with Extron Skew-Free™ twisted pair cable.

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HDMI 201 A D

VIDEO OUTPUT — RX UNITS

Number/signal type ..... 1 single link HDMI (or DVI-D*)
Connectors ..... 1 female HDMI type A

AUDIO — HDMI 201 A D TX/RX

Gain ..... Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response ..... 20 Hz to 20 kHz, ±0.06 dB
THD + Noise ..... 0.18% @ 1 kHz at nominal level
S/N ..... >76 dB at maximum output (unweighted)
Stereo channel separation ..... >63 dB @ 1 kHz

AUDIO INPUT — HDMI 201 A D TX/RX

Number/signal type
HDMI 201 A D TX ..... 1 stereo, unbalanced
HDMI 201 A D RX ..... 1 stereo, balanced/unbalanced
Connectors
HDMI 201 A D TX ..... 1 pair female RCA jacks (tip, ring)
HDMI 201 A D RX ..... (1) 3.5 mm captive screw connector, 5 pole
Impedance
HDMI 201 A D TX ..... >10k ohms unbalanced, DC coupled
HDMI 201 A D RX ..... >18k ohms unbalanced, 24k ohms balanced, DC coupled
Nominal level
HDMI 201 A D TX ..... -10 dBV (316 mVrms)
HDMI 201 A D RX ..... +4 dBu (1.23 Vrms)
Maximum level
HDMI 201 A D TX ..... +6.3 dBu, unbalanced at 1% THD+N
HDMI 201 A D RX ..... +16.6 dBu, unbalanced at 1% THD+N

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu

AUDIO OUTPUT — HDMI 201 A D TX/RX

Number/signal type
HDMI 201 A D TX ..... 1 stereo, balanced/unbalanced
HDMI 201 A D RX ..... 1 stereo, unbalanced
Connectors
HDMI 201 A D TX ..... (1) 3.5 mm captive screw connector, 5 pole
HDMI 201 A D RX ..... 1 pair female RCA jacks (tip, ring)
Impedance
HDMI 201 A D TX ..... 50 ohms unbalanced, 100 ohms balanced
HDMI 201 A D RX ..... 50 ohms unbalanced
Maximum level (Hi-Z)
HDMI 201 A D TX ..... >11.4 dBu, balanced or unbalanced at 1% THD+N
HDMI 201 A D RX ..... >5.3 dBu, unbalanced at 1% THD+N
Maximum level (600 ohm)
HDMI 201 A D TX ..... >5.1 dBm, balanced or unbalanced at 1% THD+N
HDMI 201 A D RX ..... >4.7 dBm, unbalanced at 1% THD+N
>+9 dBm, balanced or unbalanced at 1% THD+N

CONTROL/REMOTE — EXTERNAL DEVICE(PASS-THROUGH)

Serial control port input
Transmitter ..... RS-232 via (1) 3.5 mm, 3 pole captive screw connector
Receiver ..... 1 set of proprietary signals on a female RJ-45 jack
Serial control port output
Transmitter ..... 1 set of proprietary signals on a female RJ-45 jack
Receiver ..... RS-232 via a 3.5 mm, 3 pole captive screw connector

NOTE: Protocol is mirrored between the transmitter and the receiver.

Serial control pin configurations
Captive screw connectors: 1 = TX, 2 = RX, 3 = GND

GENERAL

External power supply ..... 100 VAC to 240 VAC, 50/60 Hz, 6 W max., external; to 12 VDC, 1A, regulated
Power input requirements ..... 12 VDC, 0.4 A for both transmitter and receiver

NOTE: Each transmitter or receiver can be powered either locally by an external power supply or remotely by receiver or transmitter on the other end of the CAT 5/5e/6/7 cables.

Temperature/humidity ..... Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing
Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Cooling ..... Convection, no vents
Mounting
HDMI 201 TX, HDMI 201 RX
Rack mount ..... Yes, with optional 1U, 9.5" deep rack shelf (RSU 129, #60-190-01; RSB 129, 60-604-01); 1U, 6" deep rack shelf (RSU 126, #60-190-10; RSB 126 60-604-10); or VersaTools® 1U, 3.5" deep rack shelf (RSF 123, #60-190-20; RSB 123, 60-604-20)
Furniture mount ..... Yes, with optional MBU 125 Under-Desk Mounting Kit, #70-077-01
Pole mount ..... Attachable to a projector mount pole with optional PMK 250 kit, #70-526-02
HDMI 201 A D TX, HDMI 201 A D RX
Furniture mount ..... Wall or furniture mountable in a Decora®-style opening
Enclosure type ..... Metal
Enclosure dimensions
HDMI 201 TX, HDMI 201 RX ..... 1.0" H x 4.3" W x 3.0" D (quarter rack wide)
(2.5 cm H x 10.9 cm W x 7.6 cm D)
(Depth excludes connectors.)
HDMI 201 A D TX, HDMI 201 A D RX
Faceplate ..... 2.6" H* x 1.3" W x 0.1" D (6.6 cm H* x 3.3 cm W x 0.3 cm D)
(Fits the opening in a 1 gang Decora faceplate.)
*Height is 3.8" (9.7 cm) including mounting tabs.
Device ..... 2.7" H x 1.8" W x 1.25" D
(6.9 cm H x 4.6 cm W x 3.2 cm D)
(Height excludes mounting tabs, depth excludes connectors.)
Product weight ..... 0.5 lbs (0.3 kg)
Shipping weight ..... 3 lbs (2 kg)
Vibration ..... ISTA 1A in carton (International Safe Transit Association)
Listings ..... UL, CUL
Compliances ..... CE, FCC Class A**, VCCI, AS/NZS, ICES

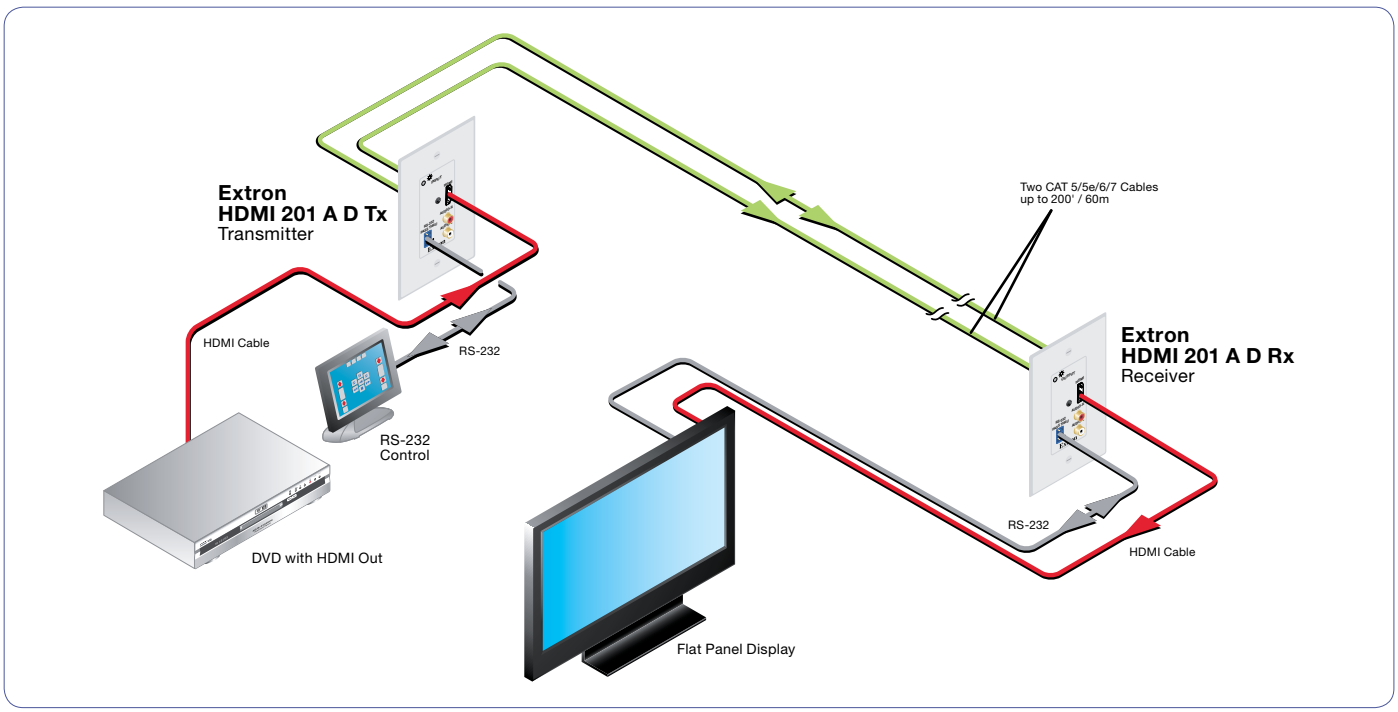
NOTE: **FCC testing is conducted with STP (shielded twisted pair) cable.

MTBF ..... 30,000 hours
Warranty ..... 3 years parts and labor

NOTE: All nominal levels are at ±10%.

NOTE: Specifications are subject to change without notice.

Note: For complete specifications, please go to www.extron.com



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